

WHAT IS CLAIMED IS:

1. A device for generating an anaerobic environment within a container comprising:

an air-permeable bag containing a heat generating composition and a carbon
5 dioxide generating material; and

a removable outer wrap enclosing said air-permeable bag to form an air barrier with respect to said air-permeable bag;

wherein said heat generating composition, when said outer wrap is removed, reacts with oxygen in air within said container to generate heat that releases carbon
10 dioxide gas from said carbon dioxide generating material.

2. The device of Claim 1, wherein said heat generating composition depletes oxygen within said container.

3. The device of Claim 2, wherein said carbon dioxide generating material is mixed with said heat generating composition.

15 4. The device of Claim 3, wherein said carbon dioxide generating material is an alkali metal bicarbonate.

5. The device of Claim 2, wherein said carbon dioxide generating material includes citric acid.

20 6. The device of Claim 2, wherein said carbon dioxide generating material includes ascorbic acid.

7. The device of Claim 4, wherein said bicarbonate is selected from the group consisting of sodium bicarbonate, calcium bicarbonate, potassium bicarbonate, and magnesium bicarbonate.

8. The device of Claim 7, wherein said bicarbonate is sodium bicarbonate.

5 9. The device of Claim 2, wherein said carbon dioxide generating material is located adjacent to said heat generating composition within said air-permeable bag.

10 10. The device of Claim 9, wherein said carbon dioxide generating material is positioned to obtain a sufficient heat transfer from said heat generating composition to release carbon dioxide from said carbon dioxide generating material.

10 11. The device of Claim 10, wherein said carbon dioxide generating material is a bicarbonate.

12. The device of Claim 11, wherein said bicarbonate is selected from the group consisting of sodium bicarbonate, calcium bicarbonate, potassium bicarbonate and magnesium bicarbonate.

15 13. The device of Claim 12, wherein said bicarbonate is sodium bicarbonate.

14. The device of Claim 1, wherein said container is a sealed container.

15. The device of Claim 14, wherein said container includes a pressure relief mechanism to release pressure within said container.

20 16. A method of creating an anaerobic environment in a container comprising the steps of:

providing a device comprising an air-permeable bag containing a heat generating composition and a carbon dioxide generating material;

placing said exposed air-permeable bag in said container;

sealing said container; and

permitting said air to react with said heat generating composition to generate heat that releases carbon dioxide gas from said carbon dioxide generating material.

5 17. The method of Claim 16, wherein said device has a removable outer wrap enclosing said air-permeable bag to form an air barrier with respect to said air-permeable bag, said method further comprising the step of:

removing said outer wrap from said air-permeable bag to expose said air-permeable bag to air before said placing step.

10 18. The method of Claim 17, wherein said heat generating composition substantially depletes oxygen within said container.

19. The method of Claim 18, wherein said carbon dioxide generating material is positioned to obtain a sufficient heat transfer from said heat generating composition to release carbon dioxide from said carbon dioxide generating material.

15 20. The method of Claim 19, wherein said carbon dioxide generating material is separated from said heat generating composition.

21. The method of Claim 18, wherein said carbon dioxide generating material is a bicarbonate.

22. The device of Claim 21, wherein said bicarbonate is selected from the
20 group consisting of sodium bicarbonate, calcium bicarbonate, potassium bicarbonate and magnesium bicarbonate.

23. The device of Claim 22, wherein said bicarbonate is sodium bicarbonate.

24. A composition for creating an anaerobic environment in a container comprising a heat generating, oxygen depleting composition and a carbon dioxide generating material.

25. The composition of Claim 24, wherein said carbon dioxide generating
5 material includes citric acid.

26. The composition of Claim 24, wherein said carbon dioxide generating material includes ascorbic acid.

27. The composition of Claim 24, wherein said carbon dioxide generating material is a bicarbonate.

10 28. The composition of Claim 27, wherein said bicarbonate is selected from the group consisting of sodium bicarbonate, calcium bicarbonate, potassium bicarbonate and magnesium bicarbonate.

29. The composition of Claim 24, wherein said heat generating, oxygen depleting composition comprises iron powder, a water retaining agent, water,
15 activated charcoal, and sodium chloride.

30. The method of Claim 16, wherein said container includes a pressure relief mechanism to release pressure within said container.